Shoulder dystocia can maim or kill a baby during delivery. Here are ways to prevent it.

Shoulder dystocia is the failure to deliver the fetal shoulder(s) after the delivery of the head when attempts at gentle downward traction are unsuccessful. It may be preceded by the classic “turtle sign,” with the neonatal face and head retracted up against the maternal perineum. Shoulder dystocia is caused by the impaction of the anterior fetal shoulder behind the maternal pubis symphysis. It can also occur from impaction of the posterior fetal shoulder on the sacral promontory.

According to the American College of Obstetricians and Gynecologists (ACOG), the reported incidence of shoulder dystocia is 0.6 to 1.4 percent among vaginal deliveries and the American Academy of Family Physicians (AAFP) cites an overall incidence of 0.2 to 3.0 percent of all deliveries. Reported rates of shoulder dystocia are influenced by fetal weight, clinical subjectivity and clinician reporting.

Predicting and preventing shoulder dystocia can be difficult because many patients with risk factors will not experience it and shoulder dystocia occurs in patients without risk factors. However, there are maternal and fetal risk factors identified by both ACOG and AAFP that increase the risk of shoulder dystocia, including:

- Previous delivery with a shoulder dystocia
- Fetal macrosomia
- Maternal diabetes
- Maternal obesity
- Short maternal stature
- Excessive weight gain during pregnancy
- Multiparity
- Post-term gestation
- Operative vaginal delivery (vacuum or forceps)

Maternal complications resulting from shoulder dystocia include third- and fourth-degree lacerations and postpartum hemorrhage. Neonatal complications of fetal brachial plexus injuries and fractures of the clavicle and humerus frequently result in malpractice litigation. Although delivery technique is commonly blamed for brachial plexus injuries, experts identify that both in-utero positioning of the infant and propulsive forces of labor can be causative factors of brachial plexus injuries.

- Common allegations in malpractice claims involving shoulder dystocia deliveries include:
  - Failure to assess for and recognize maternal and fetal risk factors for shoulder dystocia
  - Lack of informed consent regarding vaginal delivery vs. C-section in the presence of risk factors
  - Improper performance of delivery techniques

Shoulder dystocia patient safety and risk management strategies

- Proactively assess for maternal and fetal risk factors at 36 weeks of gestation using a risk assessment tool
- Provide information regarding the risk of shoulder dystocia in words the pregnant woman and family can understand — do not use medical jargon

CONTINUED

This article originally appeared in the Spring 2013 issue of Brink®, a quarterly risk solutions magazine published by UMIA. For more information, visit UMIA.com.
• Obtain informed consent for delivery and document the discussion regarding risks and shared decision-making in the medical record and on a consent form
• Assign a nurse as “scribe” to record events and notify the physician of time intervals during emergent deliveries
• Document each of the maneuvers used and the duration of each maneuver
• Use documentation templates for completion and accuracy
• Develop a shoulder dystocia algorithm to outline roles and responsibilities during an emergent delivery
• Routinely practice shoulder dystocia drills and maneuvers with the obstetrical team

Obstetrical complications and adverse events

According to the Centers for Disease Control and Prevention (CDC), there were almost four million births in the United States in 2010. Admission for childbirth is the number one reason for admission to the hospital. Most deliveries occur uneventfully. However, national statistics show that complications and adverse outcomes are prevalent and increase health care costs.

A statistical brief by the Healthcare Cost and Utilization Project of the Agency for Healthcare Research and Quality (AHRQ) reported that among the more than four million deliveries in 2008, 94.1 percent listed some type of pregnancy complication. Hospital delivery stays with pregnancy-related complications tended to be longer and were about 50 percent more costly than delivery stays without complications. Frequent complications identified are umbilical cord complications, first and second degree perineal lacerations, previous C-section and abnormal fetal heart rate or rhythm.

Significant contributing factors

Review of malpractice claims, sentinel events and research identify significant factors contributing to obstetrical adverse events and malpractice claim, such as:
• Communication breakdowns
• Lack of teamwork
• Hierarchical, disruptive culture
• Inconsistent practice
• Variable electronic fetal monitoring (EFM) education and training
• Documentation deficiencies

Malpractice allegations

Physicians practicing obstetrics and gynecology frequently find themselves involved in a professional liability claim. The 2012 ACOG Survey on Professional Liability assessed the effects of professional liability litigation on the practice of obstetrics and gynecology. Just over 77 percent of survey respondents indicated they had at least one professional liability claim filed against them during their professional careers, with an average of 2.69 claims per OB-GYN.

Almost 58 percent of ACOG survey respondents indicated they made one or more changes to their practice as a result of the risk or fear of professional liability claims or litigation. OB-GYNs significantly decreased the number of high-risk obstetric patients, stopped performing or offering vaginal birth after C-section (VBACs) and between 5 and 6 percent of respondents stopped practicing obstetrics altogether. The average age at which physicians stopped practicing obstetrics was 48.8 years, at one time the midpoint of an OB-GYN’s professional career.

Frequent malpractice allegations involved in obstetrical adverse events include:
• Failure to recognize and respond quickly to abnormal fetal heart rate (FHR) tracing
• Inappropriate use and management of high risk medications including oxytocin
• Failure to adopt evidence-based standards
• Improper performance of operative vaginal delivery

Safe and reliable obstetric care

The goal of all obstetric units is to provide safe, reliable care to women and infants. According to Knox and Simpson, “Perinatal high reliability is identified as a creation of a culture and processes that radically reduce system failures and effectively respond when failures do occur.”

Transform to a culture of safety that employs respectful communication, professional behavior, evidence-based practice and continuous improvement. The first step is to assess your current patient safety culture. According to AHRQ, a patient safety culture assessment can be used to:
• Raise staff awareness about patient safety
• Diagnose and assess the current status of patient safety culture
• Identify strengths and areas for patient safety culture improvement
• Examine trends in patient safety culture change over time\(^8\)

**Patient safety strategies**

• Outline and enforce professional behavior standards
• Provide teamwork skills training
• Standardize communication about maternal and fetal status using communication tools such as SBAR (Situation, Background, Assessment and Recommendations) and shift huddles
• Provide interdisciplinary EFM education and training using National Institute of Child Health and Human Development terminology
• Practice emergent delivery drills/simulation training
• Utilize bedside algorithms, checklists and documentation templates
• Implement evidence-based protocols and guideline bundles for:
  – Induction of labor
  – Augmentation of labor
  – Oxytocin use
  – Second stage labor management
  – Operative vaginal delivery (vacuum and forceps)
  – Sponge and retained foreign object prevention\(^9\)
• Document informed consent for induction of labor, VBAC, C-section delivery and operative vaginal delivery
• Establish an interdisciplinary OB practice committee to drive and oversee patient safety initiatives
• Develop a performance improvement process by measuring protocol and bundle reliability, maternal and fetal outcomes and identifying areas for improvement. The Institute for Healthcare Improvement’s How-to Guide: Prevent Obstetrical Adverse Events offers evidence-based bundle design, implementation and performance improvement guides\(^10\)
• Utilize health information technology to augment clinical decision-making, enhance communication and improve documentation

References


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